REMARKS

Claims 1 and 3-7 were examined in the Office Action mailed July 24, 2008.

The following new grounds of rejection were entered:

- Claims 1, 3-4 and 6-7 stand rejected under 35 U.S.C. § 102(e) as anticipated by U.S. Patent No. 6,496,806 to Horwitz, et al. ("Horwitz").

- Claim 5 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Horwitz, in view of Examiner's Official Notice.

The Applicants respectfully traverse the rejections of the pending claims based on the Horwitz reference, on the ground that this reference does not disclose or suggest all of the features of the present invention recited in independent claims 1 and 7 and dependent claims 2-6.

The Present Invention. As noted in the Applicants' May 9, 2008 Amendment, in the present invention when ID information is first detected simultaneously in a pair of ID tags, the parameter adjusting means newly sets a parameter for the pair of ID tags to indicate a measure of the strength of relationship between the pair of ID tags. Thus, at the first time ID information is simultaneously detected for a pair of ID tags (step S303 in Figure 3), the parameter adjusting means newly sets a parameter for that pair of ID tags (step S304) to indicate a measure of the strength of relationship between the pair of ID tags, e.g., whether the pair of ID tags belong to a same group. In this manner, the present invention can group ID tags distributed in a larger area than the coverage area of a tag reader. This solves the problem in the prior art where the conventional technique cannot group ID tags located in a wide area when first detected because the ID tags are located in an area larger than the coverage area

of the tag reader. Further, the present invention can calculate the strength of relationship among a plurality of RFID tags from the accessibility of the tags, and judge whether the RFID tags belong to the same group.

The Horwitz Reference. The Horwitz reference discloses a system in which each item is grouped *beforehand* as a member of a cluster, and then, if a predetermined number of RFID tags belonging to the same cluster are located, it is assumed that every item associated with the cluster is present at the cluster location. Horwitz Fig. 1 (flow chart, steps 30, 32, 34); Fig. 4 (showing pallet-loads ("clusters") containing items which are assumed to contain all items associated with a cluster once a threshold number of items in the cluster are detected).

In contrast to the present invention, Horwitz teaches merely association of *pre-identified* RFID tags with a cluster of items. In the present invention, RFID tags constituting a group may be dynamically changing, and the present invention provides for calculating the grouping of the RFIDs in a dynamic manner based on a parameter from the accessibility of the RFID tags, permitting the grouping of ID tags distributed in a larger area than the coverage of the tag reader. As illustrated in Horwitz Fig. 4, in the Horwitz system, cluster location is determined by the location of the tag reader (forklift 110 position detected by floor detectors 106), all RFID tag detection is conducted within the range of the tag detector, and the system simply assumes all items associated with the cluster are present once a predetermined threshold number of items has been detected.

Thus, when compared to the language of claim 1, Horwitz does not disclose or suggest:

(i) "parameter adjusting means for increasing and decreasing values of the parameter according a number of pieces of ID information detected simultaneously in the ID tags by a mobile tag reader" – the number of items detected by Horwitz *is only used to determine whether all the items associated with a cluster can be assumed to be present*, not to make *any* adjustment to any parameter which "represents a measure of a strength of relationship among a plurality of ID tags." Horwitz at 6:51-7:5 ("The threshold number of items corresponds to the minimum number of tags that must be read *in order to ascertain with an acceptable level of certainty that the cluster has been read.*"; there is no discussion in Horwitz regarding altering (either increasing or decreasing) of individual items' cluster membership association based on the number of pieces of ID information detected simultaneously);

or

(ii) "wherein when ID information is first detected simultaneously in a pair of ID tags, the parameter adjusting means newly sets the parameter for the pair of ID tags to indicate the measure of the strength of relationship between the pair of ID tags" – in Horwitz, there is no discussion of any sort regarding *setting* of relationship parameters based on the simultaneous detection of a pair of ID tags. The Applicants note that while the July 24, 2008 Office Action at 3 identifies Horwitz at 7:10-14 as disclosing this feature, actually, rather than *"newly"* setting parameters based on *initial* simultaneous detection of a pair of ID tags,

this portion of Horwitz only describes (a) determining, from the interrogation of the tags within the tag reader's range, which cluster IDs *already associated with each detected item* are present at a given location, and (b) from this reading of the *already set* cluster information then (if a threshold number of items associated with cluster are present) assuming that the items associated with the cluster are also present at the location. In other words, Horwitz does not teach any setting of a parameter which is "the measure of the strength of relationship between" a pair of ID tags as a result of the 7:10-14 determination of whether a cluster is present at a given location. Because this portion of Horwitz does not teach anything with regard to *newly* setting a parameter for a *"first* detected simultaneously" pair of ID tags, where the parameter is "the measure of the strength of relationship between" the pair, this limitation of claim 1 is not disclosed or suggested by this reference.

Because the Horwitz reference does not disclose or suggest at least the above limitations of the pending independent claims, the Applicants respectfully submit that claims 1 and 3-7 are patentable over this reference under § 102(e) and § 103(a). Reconsideration and withdrawal of the pending rejections based on the Horwitz reference is respectfully requested.
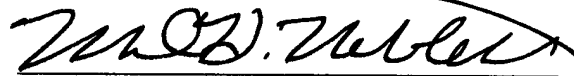
CONCLUSION

In view of the foregoing, the Applicants submit that claims 1 and 3-7 are in condition for allowance. Withdrawal of the pending rejections and issuance of a Notice of Allowance for there claims is respectfully requested.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #010755.53231US).

Respectfully submitted,

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